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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/638,849	08/11/2003	James Xixian Wu	SP-1076.2 US	4449

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EXAMINER

CANTELMO, GREGG

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/638,849

Applicant(s)

WU, JAMES XIXIAN

Examiner

Gregg Cantelmo

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Applicant's claim to U.S. Patent Application Serial No. 09/721,250 is acknowledged and proper.

### ***Information Disclosure Statement***

2. No IDS appears to have been filed with the application prior to this office action.
3. Since this application is a continuation application filed under 37 CFR 1.53 (b), the examiner has considered information, which has been considered by the Office in the parent applications. Such information need not be resubmitted in the continuing application unless the applicant desires the information to be printed on the patent. Copies of references cited by applicant in accordance with MPEP § 609, § 707.05(b) and § 708.02 are not furnished to applicant with the Office action. Additionally, copies of references cited in continuation applications if they had been previously cited in the parent application are not furnished.

### ***Drawings***

4. The drawings received August 11, 2003 are acceptable for examination purposes.

***Specification***

5. The disclosure is objected to because of the following informalities: the status of the parent application identified in the first sentence of the instant application should be updated since it has matured into a U.S. patent. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,263,380 (Riedl).

Riedl discloses a non-crimped alkaline electrochemical cell having an adhesive closure comprising: a container 1 having an open end and a side wall, a positive electrode 7, a negative electrode 6, an alkaline electrolyte solution, a cover 4 disposed on the open end of the container and having a peripheral wall extending radially outside of the side wall of container 1 (Fig. 2). An adhesive material 51 is disposed between the sidewall of the container and the peripheral wall of the cover for adhering the cover to the container. Neither the peripheral wall of the cover 4 nor the open end of the container 1 is crimped (Fig. 3 as applied to claim 1).

A seal 52 is disposed between the sidewall of the container and the peripheral wall of the cover (Fig. 3 as applied to claim 2).

Riedl discloses a non-crimped alkaline electrochemical cell having an adhesive closure comprising: a container 1 having an open end and a side wall, a positive electrode 7, a negative electrode 6, an alkaline electrolyte solution, a cover 4 disposed on the open end of the container (Fig. 2). An first adhesive material 51 is disposed between the sidewall of the container and the peripheral wall of the cover for adhering the cover to the container. A second adhesive material 52 is disposed between the side wall of the container and the peripheral wall of the cover (Fig. 3, col. 4, ll. 32-59 and col. 5, ll. 34-44 as applied to claim 3).

First adhesive 51 is closer to the open end of the container 1 and the second adhesive 52 is located further away from the open end of the container (Fig. 3 as applied to claim 4).

The cover seals the upper surface of the can and therefore inherently comprises a seal (Figs. 2 and 3 as applied to claim 6).

The cover 4 disposed on the open end of the container and having a peripheral wall located on the outer surface of the container 1 (Fig. 2 as applied to claim 7).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Riedl in view of either U.S. patent Nos. 4,690,879 (Huhndorff) or 4,401,733 (Shirai).

The teachings of Riedl have been discussed above and are incorporated herein.

The difference not yet discussed is the epoxy comprising Bisphenol A.

The insulating securing means could be an electrically nonconductive adhesive that secures the inner area of the conductive member to the bottom of the container. Suitable nonconductive adhesives for this invention are methyl methacrylate, ethyl cyanoacrylate, bisphenol A/epichlorohydrin resin and polyamide blends, and the like (Huhndorff, col. 3, ll. 3-9).

The bisphenol epoxy adduct polyamide amine is superior as a sealing agent. The above superiority is considered to be attributable to the fact that, as may be analogized from the structure of the molecular chain, the construction having aromatic hydrocarbon (bisphenol group) has less molecular vibration up to high temperature as compared with a hydrocarbon single construction (Shirai, col. 3, ll. 20-27).

The motivation for selecting the epoxy to comprise Bisphenol A is that it provides a sealing material having superior sealing properties.

Therefore it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the teachings of Riedl by selecting epoxy to comprise Bisphenol A since it would have provided a material for sealing have superior sealing properties.

### ***Double Patenting***

10. Claims 1 and 2 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 6,605,383 (Wu). Although the conflicting claims are not identical, they are not patentably distinct from each other.

Wu claims a non-crimped alkaline electrochemical cell having an adhesive closure comprising: a container having an open end and a side wall, a positive electrode, a negative electrode, an alkaline electrolyte solution, a cover disposed on the open end of the container and having a peripheral wall extending radially outside of the side wall of container, and an adhesive material disposed between the sidewall of the container and the peripheral wall of the cover for adhering the cover to the container (claims 1, 5, or 9 as applied to instant claim 1).

A seal is disposed between the sidewall of the container and the peripheral wall of the cover (claims 1, 5 or 9 as applied to instant claim 2).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregg Cantelmo whose telephone number is (571) 272-1283. The examiner can normally be reached on Monday to Thursday from 9 a.m. to 6 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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FAXES received after 4 p.m. will not be processed until the following business day.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregg Cantelmo  
Primary Examiner  
Art Unit 1745

gc

A handwritten signature in black ink, appearing to read "Gregg Cantelmo", written in a cursive style.

September 15, 2004